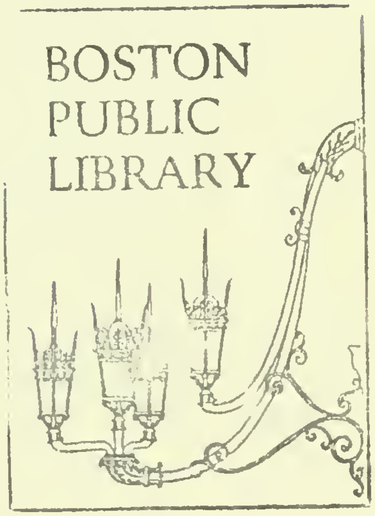
GOV DOC
BRA
597
Vol. 3-4



BOSTON
PUBLIC
LIBRARY

GOV DOC
BRA
597
Vol. 3-4

Bind Vol 3 & 4 in one Vol.

Program for
HYNES AUDITORIUM EXPANSION

Boston, Massachusetts

Property Of
BOSTON REDEVELOPMENT AUTHORITY
Library

City of Boston
Kevin H. White, Mayor

Boston Redevelopment Authority
Robert J. Ryan, Director
Public Facilities Department
Donald B. Manson, Director

BOSTON
PUBLIC
LIBRARY

Volume III
Executive Summary
Traffic and Parking Analysis

2350-00
2 February 1983

Perez Associates/Studio One New Orleans, Louisiana
Event and Facility Consultants Portland, Oregon
Norman A. Abend Wayland, Massachusetts

PROGRAM FOR
HYNES AUDITORIUM EXPANSION
BOSTON, MASSACHUSETTS

CITY OF BOSTON
KEVIN H. WHITE, MAYOR

BOSTON REDEVELOPMENT AUTHORITY
ROBERT J. RYAN, DIRECTOR

PUBLIC FACILITIES DEPARTMENT
DONALD B. MANSON, DIRECTOR

VOLUME III
EXECUTIVE SUMMARY
TRAFFIC AND PARKING ANALYSIS

2350-00
2 FEBRUARY 1983

PEREZ ASSOCIATES/STUDIO ONE
NEW ORLEANS, LOUISIANA

EVENT AND FACILITY CONSULTANTS
PORTLAND, OREGON

NORMAN A. ABEND
WAYLAND, MASSACHUSETTS

FOREWORD

Volume III of the Program for Hynes Auditorium Expansion is the Executive Summary of the Parking and Traffic Analysis prepared for Perez Associates/Studio One by Norman A. Abend, Traffic and Transportation Consultant, Wayland, Massachusetts.

INTRODUCTION

This report was undertaken to provide an assessment of the traffic and parking impacts associated with the expansion of Hynes Auditorium, and to make recommendations for mitigating actions. The report deals at length with the derivation of parking demand and the need for additional spaces to handle Hynes demand because of its importance to the area. Traffic circulation was found to be of secondary concern and received less attention. Nevertheless, a number of circulation improvements are recommended. The detailed analysis is available under separate cover.

Parking is an important issue because there is presently a shortfall of spaces serving Hynes Auditorium as well as adjacent hotel and other businesses in the area. It is expected that the impact of the Hynes expansion on parking will be to increase the frequency of Hynes-related parking demand rather than the number of spaces required. Traffic problems are less critical because volumes in the area are below the practical capacity of the street system.

The purpose and primary intent of the Hynes expansion is to attract more national conventions. Most attendees at these events arrive in Boston via the airport and taxi to Hynes or nearby hotels. The increased utilization of Hynes will consist of these national conventions which generate less demand for parking than local shows. Several trade and consumer shows which now create the greatest demand for parking are expected to relocate to the Bayside Exposition Center and Boscom. This effect is already being felt. These factors taken together leave one to conclude that while Hynes may be used more frequently, it will not necessarily require a greater number of parking spaces. Thus, if the existing measureable deficit for Hynes-related parking could be met, the major traffic and parking problems associated with the expansion would be manageable.

PARKING DEMAND

1. The demand for parking at Hynes is cyclical and depends on the mix of shows.

There are five distinct types of shows which take place at Hynes. These events differ in their average duration, the number of spaces they require, and the time, midweek or weekend, of greatest parking demand. Additionally, Hynes is most heavily utilized in the spring and fall. During the Christmas holidays, when the highest demand for shopper parking occurs, the facility is least utilized.

		Average Duration of Shows
Consumer Gate Show:	Open to the public; heavily advertised; involve a popular subject (auto, home, etc.).	7 days
Trade Gate Show:	Open to the public at certain times; promoted mostly through the industry; limited advertising; specialty subject (hardware, gift, solar, etc.).	3 days
National Convention:	Not open to the public; most delegates stay at nearby hotels; (AIA, AMA, etc.).	4 days
Regional Convention:	Trade shows; generally not open to the public or advertised; most people commute on a daily basis; some hotel use (i.e., New England Dental Conference).	3 days
Special Events:	Graduations, concerts, private meetings (college commencements, Metropolitan Opera, etc.).	1 day

2. Current conditions at Hynes are the basis for determining parking demand.

The unique geography, function and location of Hynes limit the extent to which one can use published data from other cities as a basis of projecting parking demand. Thus, various local field surveys and interviews were carried out to supplement formal data. Both methodologies were utilized to calculate the average peak daily attendance, i.e., the highest average number of people present at Hynes at any one time. The estimate includes attendees as well as exhibitors. Where appropriate, arrivals by public transportation and attendees staying at local hotels were subtracted from the attendance figure in order to calculate parking demand.

Shown below is a table summarizing the frequency of each type of event, the duration, the parking demand, and the maximum number of days that demand is sustained. Often the maximum demand is not experienced throughout an event.

PARKING DEMAND

Type of Show	Average Number of Days/Show	Peak Parking Demand	Event Frequency Per Year	Total Days Per Year/(%)	
National Convention	4	1200	25	100	(44%)
Consumer Gate	7	3500	10	70	(31%)
Regional Convention	3	2100	10	30	(14%)
Trade Gate	3	2000	5	15	(7%)
Special Event	1	1200	10	10	(4%)
TOTAL			60	225	(100%)

3. Even though Hynes will double in size, the projected demand for parking will not double for the following reasons:

*** The proposed expansion is geared to provide space for large national convention or for the operation of two small events concurrently rather than to increase significantly the size of exhibitions. Most of the added areas and spaces to be enlarged will be lobby, pre-function, and meeting rooms. Of the 375,000 square feet total additional area, only 19 percent (72,000 square feet) will be allocated to expanded exhibit space. The Auditorium will seat some 1,000 fewer persons.

*** Two competing facilities are going to attract local and regional events which currently are booked at Hynes and generate the most parking demand. Both the Bayside Mall and the Boscom project will have large exhibit space capable of attracting gate and regional trade show events.

4. The expansion will increase the number of days that Hynes is in use rather than require more parking.

It is estimated that the expanded Hynes can accommodate up to 90 events annually vs. the 60 events that currently take place. Two scenarios have been developed portraying a future mix of shows. These are shown in the table below. Scenario I approximates a straight line projection of the current booking schedule (assuming no more than 22 local events as agreed to between the Auditorium Commission and the Neighborhood Association of Back Bay). Scenario II projects a national convention oriented mix of events. This more closely describes the expected pattern of use.

Although the number of days of Hynes use is about the same in both cases, national conventions, which cause the lowest parking demand, will constitute 70 percent of the Auditorium's use. Events that require the largest amount of parking would experience a significant decline in frequency.

PROJECTED UTILIZATION
HYNES AUDITORIUM

Type of Show	Event Frequency/Year I	Event Frequency/Year II	Total Days Per Year I	(%)	Total Days Per Year II	(%)
National Convention	42	60	168	(49%)	240	(70%)
Consumer Gate	12	6	84	(25%)	42	(12%)
Regional Convention	12	9	36	(11%)	27	(8%)
Trade Gate	14	10	42	(12%)	30	(8%)
Special Event	10	5	10	(3%)	5	(2%)
TOTAL	90	90	340	(100%)	344	(100%)

Option 1: Projects current booking schedule with limit of 22 local events.
Option II: Assumes a shift to a greater proportion of national conventions.

are described. With such data in hand, it is possible to project future demand based on the frequency of events and the possibility that some multiple bookings would occur for smaller shows.

In sum, the Hynes expansion project is based primarily on attracting large national conventions and secondarily on increasing the number of events. With competing convention centers being built at Bayside Mall and Commonwealth Pier, both within the city, the likelihood of two simultaneous shows at Hynes is reduced. Thus, taking care of existing measurable demand is a vital first step, especially since it is not possible to predict accurately what the frequency and mixture of events will be, and whether there will actually be an increase in total demand for parking.

PARKING DEFICIT

1. A projected midweek deficit of about 1,100 spaces is estimated to exist for 100 to 115 days per year.

   Depending on the ultimate mix of shows at Hynes, there will be a peak average demand of 2,100 spaces. Given the current supply of between 600 and 1,000 spaces in the area that are available for Hynes use, the projected deficit will be between 1,100 and 1,500 spaces.

2. There will continue be an adequate supply of parking spaces to serve Hynes during the evening and on weekends for any type of use.

   Surveys on weekends and during the evening hours found over 3,500 vacant spaces when Hynes is not in operation.

TRAFFIC

1. More effective control of curbside loading and illegal parking would eliminate most, if not all, of the congestion around Hynes Auditorium.

   Analysis of past and existing traffic volumes shows no increase in volumes over the past several years. A capacity analysis of nearby intersections shows that even during peak hours, they operate well below capacity. When there is congestion in the vicinity of Hynes, it is nearly always the result of illegal parking or construction activities that reduce the effective street width.

2. Curbside drop-off for the expanded Hynes is adequate to meet the needs of taxis and visitors.

   Boylston Street has five lanes of which two are currently used for parking. Parking would be eliminated adjacent to Hynes

3. Several operational policies should be considered by Hynes management to control parking and traffic problems.

   a. Shows that generate a significant amount of parking should not be booked concurrently.
   b. Local events with a large number of attendees should utilize a satellite parking area for shuttling attendees who come by car. Rental fees should include satellite parking costs and shuttle bus service.
   c. Large shows that have significant loading requirements should pay for police details to direct traffic and control curbside drop-off and loading activities adjacent to Hynes. These costs should be included in rental agreements.

4. A site for marshalling a minimum of 20 trucks waiting to unload or pick up at Hynes, should be selected and developed.

   Either of the two proposed locations for constructing a parking garage, the Cheri or the Massachusetts Avenue/Boylston Street site, could accommodate a truck marshalling area at grade level. A more remote, at-grade location might be a more financially feasible solution, yet would still be acceptable to show managers.

5. Taxi waiting area should be located on Boylston Street between St. Cecilia and Dalton Streets.

   Boylston Street eastbound is three lanes wide at this location and no more than two lanes are needed to handle through traffic demands, even with an expanded Hynes Auditorium.

6. The current loading docks will be adequate to handle future needs if the following proposed improvements are carried out:

   a. Lease basement floor of Cheri garage so that Auditorium

can control parking on Cambria Street. Basement can also be used for crate storage.

b. Widen access drive into basement at Huntington Avenue entrance.

c. Relocate house services (trash pick-up, food delivery) to a different basement location providing two additional loading docks.

BACK BACK
B65R
1983

Author

Title
Hynes Auditorium Expansion

Date	Issued to

Program for

HYNES AUDITORIUM EXPANSION

Boston, Massachusetts

Property Of
BOSTON REDEVELOPMENT AUTHORITY
Library

BOSTON
PUBLIC
LIBRARY

City of Boston
Kevin H. White, Mayor

Boston Redevelopment Authority
Robert J. Ryan, Director
Public Facilities Department
Donald B. Manson, Director

Volume IV
Traffic and Parking Analysis

2350-00
2 February 1983

Perez Associates/Studio One New Orleans, Louisiana
Event and Facility Consultants Portland, Oregon
Norman A. Abend Wayland, Massachusetts

PROGRAM FOR
HYNES AUDITORIUM EXPANSION
BOSTON, MASSACHUSETTS

CITY OF BOSTON
KEVIN H. WHITE, MAYOR

BOSTON REDEVELOPMENT AUTHORITY
ROBERT J. RYAN, DIRECTOR

PUBLIC FACILITIES DEPARTMENT
DONALD B. MANSON, DIRECTOR

VOLUME IV
TRAFFIC AND PARKING ANALYSIS

2350-00
2 FEBRUARY 1983

PEREZ ASSOCIATES/STUDIO ONE
NEW ORLEANS, LOUISIANA

EVENT AND FACILITY CONSULTANTS
PORTLAND, OREGON

NORMAN A. ABEND
WAYLAND, MASSACHUSETTS

FOREWORD

This Parking and Traffic Analysis, Volume IV of the Program for Hynes Auditorium Expansion, was prepared by Norman A. Abend, Traffic and Transportation Consultant, Wayland, Massachusetts. The Executive Summary of this study appears in Volume III of the program.

TABLE OF CONTENTS

Page

SUMMARY i

INTRODUCTION 1

- Study Purpose and Orientation 1
- Parking Overview 3
- Trends in Auditorium Attendance and the Effect on Parking 7

PARKING DEMAND 12

- Calculated Parking Demand 12
  - Gate Shows 12
  - Regional Conventions 14
  - National Conventions 14
  - Calculated Parking Demand Summary 15
- Results of Patron Survey 19
- Analysis of Hynes Utilization Study: 1965 - 1978 23
- Summary 30

FUTURE HYNES ACTIVITIES 33

- Projections 33

PARKING SUPPLY 36

- Results of Garage Surveys 36
- Nearby Parking Supply 41

RECOMMENDATIONS 44

- Number of Spaces for Off-Street Parking 44
- Garage Location 47
- Cheri Garage Operations 50
- Operating Guidelines 53

TRAFFIC CIRCULATION 56

- Traffic Overview 56
- Capacity Analysis 58
- Taxi Access 60

LIST OF EXHIBITS

No.		Page
1	Attendance at Hynes Auditorium	11
2	Calculation of Parking Demand Gate Show	16
3	Calculation of Parking Demand Regional Convention	17
4	Calculation of Parking Demand National Convention	18
5	Results of Survey at Gate Show	21
6	Theoretical Weekday Garage Demand	22
7	Demand Based on Utilization Study Consumer Gate Show	25
8	Demand Based on Utilization Study Trade Gate Show	26
9	Demand Based on Utilization Study National Convention	27
10	Demand Based on Utilization Study Regional Convention	28
11	Demand Based on Utilization Study Special Events	29
12	Parking Demand Summary	32
13	Existing and Projected Bookings	35
14	Results of Daytime Garage Survey	39
15	Results of Nighttime Garage Survey	40
16	Parking Garages in Hynes Auditorium Area	43
17	Capacity Calculation	59

SUMMARY

This report addresses the parking and circulation issues associated with the expansion of Hynes Auditorium. The exact dimensions and projected use of the additional space is discussed in other reports, but some reference to the ultimate composition of Hynes Auditorium as a convention center is needed as background. A majority of the additional space will be in the form of meeting/conference room areas, which is intended to support the exhibit space, particularly serving national conventions that require a large amount of conference room area. Additionally, a significant increase will occur in the circulation, lobby and other areas that are not specifically categorized as either an exhibit or meeting area.

Although the expansion will more than double Hynes, the increase in the number of events per year will be much smaller. The number of annual events per year is projected to range between 60 and 90, compared to a current activity level of between 50 and 60 events. This is due to the nature and size of the market for convention activity and to two competing facilities now under construction in Boston, Bayside Mall and the Boscom project.

The principal reason for the Hynes expansion is to handle large national conventions which heretofore bypass Boston because of the lack of hotel and auditorium capacity. The expanded Hynes, is expected to attract a larger number of national conventions while sloughing off some trade and gate shows. The nature of Hynes events affects parking and traffic

more than any other single factor: national conventions require less parking than regional trade shows, local conventions, or consumer gate shows.

In estimating the parking demand for the Hynes expansion, demand calculations were made for a variety of uses ranging from large consumer gate shows to small national conventions of 3,000 to 5,000 people. The largest parking demand is generated by popular consumer gate shows such as the auto show, while the least demand is generated by national conventions. This is because most exhibitors and attendees at national gate shows arrive by air and reach Hynes on a daily basis by walking or by cab. The major parking demand at these conventions is generated by the host organization and a few local exhibitors.

Estimates of parking demand for individual events range from about 1,200 for a special event such as a graduation or a theater event or a national convention to 3,500+ for a consumer gate show.

Based on field studies, about 1,000 parking spaces in the area are utilized by Hynes when it is in operation. This demand is satisfied by the Prudential and other nearby garages, on the street, and by nearby private parking areas. It is estimated that an additional 1,100 spaces, bringing the total number of spaces serving Hynes up to about 2,100, would serve most events. This level would not satisfy consumer gate shows on weekdays or a few very large regional trade shows.

In the future, events that generate very large demand for parking will continue to have to rely on a greater use of public transportation and/or the use of shuttle buses and satellite parking lots.

The preferred location for additional parking is as close as possible to Hynes Auditorium. Of several sites that were looked at, only two appear to be feasible, the triangular air

rights space opposite Hynes on Dalton Street and a combination ground/air rights space at the corner of Mass. Ave. and Boylston. Either location would admirably serve Hynes Auditorium. The Dalton Street location is preferred because it is closer to Hynes and can do a better job of serving other commercial parking generators when Hynes is not in operation. The Mass. Ave./Boylston site is less desirable. If it is developed as a mixed-use site, it is unlikely that a significant amount of new parking could be created to serve Hynes. If it is developed exclusively for parking, there is some question as to the financial feasibility of the garage. Use of this site exclusively for a Hynes garage requires more detailed analysis.

The report concludes an extension of the Cheri garage as being the most practical way to serve Hynes Auditorium, although there may be some design complications. It also recommends that operational limitations be placed on Hynes management so that by careful scheduling, severe overloading of the local parking supply can be prevented.

Insofar as traffic is concerned, an analysis of past and existing traffic volumes shows very little increase in volumes over the past several years. A capacity analysis of nearby intersections shows that even during peak hours, they operate at well below capacity. When there is congestion in the vicinity of Hynes, it is nearly always the result of illegal parking or construction activities that reduce the effective street width. More effective control of curbside loading and illegal parking would eliminate most, if not all, such congestion. It is recommended that the Hynes require police details to be paid for by show sponsors for those events that are expected to cause problems.

The Capacity Analysis shows that even with the addition of 600 spaces attached to the Cheri garage, the Level of Service would not be significantly affected during the morning or even-

ing peak hours at Dalton/Boylston or other more distant intersections.

The report recommends that the taxi storage area be located on Boylston Street between St. Cecilia and Dalton Streets. This would be within sight of the Hynes entrance and would not require any elaborate communication system. Boylston Street eastbound is three lanes wide here and no more than two lanes are needed to handle through traffic demands, even with an expanded Hynes Auditorium.

It is believed that the current loading docks will be sufficient to handle the expansion. This is because the size of the largest show will not increase. Also, with the increase in additional common area throughout the auditorium, it will free some loading areas now used for staging and storage for more germane loading and unloading operation.

The location of a truck marshalling yard has been addressed in a memorandum contained in the appendix. A location either in the triangular area opposite Dalton Street or within a mixed-use structure on the corner of Boylston and Mass. Ave. would serve Hynes. Discussions with several show operators found no strong locational preference for truck marshalling. Most people felt that as long as good communications are established, a remote site was acceptable.

In sum, the expansion project will not create a concomitant increase in parking demand. An expected change in event composition may actually reduce the number of days when the parking supply is overloaded. An increase in the parking supply of about 1,000 spaces over the existing supply of spaces in the area would satisfy Hynes demand most of the time.

INTRODUCTION

Study Purpose and Orientation

The purpose of this report is to provide an assessment of the traffic and parking impacts associated with the expansion of Hynes Auditorium. The report deals mostly with the derivation of parking demand and the availability of spaces to handle Hynes demand. There are two sections to the report: the larger of the two deals with the parking demand and supply and the smaller deals with the traffic situation.

Parking is the more important issue for Hynes because there are frequent periods when there is a shortfall of spaces in the area. Traffic problems are less critical because volumes in the area are below the design capacity of the street system. Congestion which does occur in the vicinity of Hynes can be linked directly to the use of street areas designated for moving traffic by loading and parking activities associated with Hynes and its commercial neighbors. These include nearby hotels, stores, and office buildings.

During periods of intense Hynes use, when street capacity is most needed, much of the available capacity is lost. Thus, to a degree, the traffic and parking problems are related. If all loading, drop-off, and other curb uses could be diverted to other locations, the street system would experience congestion and delays much less frequently. However, some of this curbside

demand is caused by other generators and is not subject to transfer even if Hynes were to provide alternatives.

The objective of any Hynes supported parking and/or traffic improvements should be directed toward improving the situation, first by contributing to the general supply of parking in the area and, secondly, by making operational improvements in the circulation system as needed. However, as is shown in the body of the report, no new street construction is called for.

Parking Overview

Although the expansion will double the amount of space available for rental, the increase in parking demand will not be double the present demand, either in terms of the total number of spaces required or the frequency of events reaching maximum demand. Three factors are at play here: the size of the market for events, the type of shows that will be booked, and the availability of competing facilities. The concurrent progress on Bayside Mall Exposition Hall and the Commonwealth Pier Boscom projects portend competition for Hynes, especially in the areas of consumer gate shows and electronics events, both regional and national. Boscom will also attract shows other than the permanent electronic exhibits.

The Hynes expansion and the new supply of about 3,000 hotel rooms is predicated on attracting large national trade shows and conventions that have heretofore been unable to book Boston. Such events would draw most of their attendees and exhibitors from distant locations, and they would arrive by airplane. They would stay in nearby hotels and walk to and from Hynes to attend events. (A small percentage would come by cab or special bus.) To be sure, such shows also attract a strong local contingent of exhibitors and attendees who would need to park in the area to load and unload exhibit materials, and would add to the traffic flows in the Hynes area.

There are at least two good reasons for using existing conditions to estimate parking demand. One is that satisfying such demand would at least take care of what is now a problem. With increased competition for events from other Boston facilities and with prudent scheduling on the part of Hynes and show booking companies, future peak demand may not be much greater than what it is today. More likely there will be an increase in the frequency of peak demand rather than in its intensity.

A second reason is that the theoretical parking demand for certain categories of shows exceeds the ability to provide such spaces on weekdays. On weekends, parking is much less of an issue since all-day parking by office workers is not a factor. There are both physical as well as financial limitations to any increase in parking supply to serve Hynes. At present, shows that generate the greatest parking demand rely on alternatives such as satellite parking and shuttle buses. These are viable substitutes for on-site parking provided that the location of lots and scheduling of shuttle buses is carefully done and that people are notified.

Theoretically, the increased exhibition space would allow two or more shows of a regional nature to run simultaneously, and it is these events which create the worst traffic and parking problems. Most attendees and exhibitors live in the region and expect to commute on a daily basis during the show. Exhibitors, especially smaller ones, are likely to unload at street level and then look for a parking space. However, the Hynes expansion is not based on increasing this type of event.

These events are already notorious among the commercial and hotel neighbors of Hynes. When they occur, traffic congestion, caused more by heavy and "illegal" curb use than by high volumes, is common. The effect of doubling up such events is hard to imagine. Therefore, from a planning standpoint, it is unrealistic to consider providing for the maximum theoretical parking demand of two large regional shows when servicing a single one is already difficult.

Yet another consideration is the parking demand generated by the businesses surrounding Hynes. On a 9:00 to 5:00, five day a week basis, they fill most of the available parking spaces that could otherwise be used to serve Hynes. The larger of them provide some parking on their own, but none satisfy their own

demand. Although Prudential Center, with its 3,500 underground spaces, comes closest, employee parking spills over into other lots and garages. Prudential has a liberal parking policy which allows some public access to its spaces. However, more and more, the supply is being husbanded to satisfy the needs of Prudential tenants. This has meant less general public access to the Prudential garage.

The existing hotels, as well as the new ones just opened or under construction, pose another problem. Many of their peak periods of business result from smaller meetings held entirely within the confines of the hotel. These have the same traffic characteristics as Hynes events, especially in demand for parking. Because the largest concentration of hotels in the city borders Hynes, this competing demand for spaces will continue and increase as new hotels are opened.

One issue often mentioned by Hynes users is the need for parking spaces dedicated to Hynes use at all times. This would certainly be in the best interests of Hynes operations, but it poses financial feasibility questions. On nights and most weekends when the current supply is adequate to serve Hynes, demand for these spaces would be weak. On a weekday basis, a supply subject to intermittent Hynes demand and open to the general public on an infrequent basis would probably have trouble filling up on non-Hynes days. The question is whether it is feasible from a financial or general resource position to provide spaces that would be needed for only about 200-250 days of daytime use.

Given these parameters of Hynes parking demand and the conditions under which supply and demand function for Hynes and the surrounding businesses, the analytical approach taken in this report has been to concentrate on current demand intensity. Such demand is based on certain types of events which

are described. With such data in hand, it is possible to project future demand based on the frequency of events and the possibility that some multiple bookings would occur for smaller shows.

In sum, the Hynes expansion project is based primarily on attracting large national conventions and secondarily on increasing the number of events. With competing convention centers being built at Bayside Mall and Commonwealth Pier, both within the city, the likelihood of two simultaneous shows at Hynes is reduced. Thus, taking care of existing measurable demand is a vital first step, especially since it is not possible to predict accurately what the frequency and mixture of events will be, and whether there will actually be an increase in total demand for parking.

Trends in Auditorium Attendance and the Effect on Parking

In looking at the trends in auditorium attendance, the type of show and duration are important factors. There does seem to be a limit on attendance on a given day, and this has had the effect of increasing the number of days a show is scheduled. If more days are booked for a consumer gate show, and total attendance is fixed, peak accumulations can also be limited.

In looking at the Hynes expansion, the primary intent is to attract national conventions. It is not aimed at increasing the number of consumer gate shows or allowing larger regional shows to occur. Thus, the average attendance at a national convention is likely to increase in the future as the largest conventions can be attracted. However, these do not require the largest amount of parking.

The increase in the number of hotel rooms in Back Bay in combination with the doubling of Hynes Auditorium will allow Boston to attract national conventions that could not be handled by the city in the past. While the increase in Hynes square footage will allow more than one event to take place simultaneously, the expansion is geared to capitalizing on a new market. The Hynes expansion is expected to result in a higher degree of utilization even though competing facilities are under construction in Boston.

The construction of a gate show facility proposed at Bayside Mall would divert some of current gate shows from Hynes Auditorium. This is already happening. There is also a possibility that regional trade shows that need parking more than hotel space would also use Bayside. Another source of competition would come from Commonwealth Pier, which is being designed primarily as a computer trade mart. However, Boscom may be in a position to attract some general business in addition to its

basic computer emphasis. It is expected that the void created by some shows going to Bayside Mall, Commonwealth Pier, or even the Metropolitan Center would be substituted for by booking other conventions now not able to use Hynes because of its small size and its lack of availability at certain times.

The availability of hotel spaces in Back Bay will be a major determinant in the mix of shows and, ultimately, in their size. Between the Westin, Marriott, Hilton and other hotels under construction, over 2,500 additional rooms will be available within a year or two, bringing the total supply of hotel rooms to over 5,000 within close walking distance. There are well over 1,000 additional rooms in the Park Plaza area. The large number of hotel rooms within walking distance is significant because if the increase in Hynes use is mostly in handling national conventions, its demand for parking may not be as great as it is now.

A large number of hotel rooms is vital for national conventions. But such activities do not and will not test the local parking supply as much as regional trade shows or gate shows. Except for local arrangement committees and local members who arrive by car or transit, most national convention attendees will walk to Hynes from adjacent or nearby hotels. Thus, the increase in the hotel supply could result in a reduction in all-day parking demand by causing an increase in national conventions over regional ones.

The pressure to expand Hynes Auditorium over and above lost bookings can be seen from a compilation of attendance for about a 15 year period. This information is shown in Exhibit 1. Prior to 1970, average attendance per show did not exceed 41,000 persons. Between 1970 and 1978, however, average attendance ranged between 36,000 and 58,000 persons. Although this information is based only on available data (information on some shows

was not available) and some attendance figures were most likely estimated, it does indicate that show attendance is gradually increasing. Averaging all shows may not give a true "average," but it does show the increase in attendance.

The median figures are equally significant in terms of showing the trend toward larger conventions. Most bookings at Hynes Auditorium are not popular gate shows. They are comparatively small, mostly trade shows with either a regional or national attendance. The large difference between median and mean values is explained by the size of gate shows, such as the automobile show or home show, which are estimated to have an attendance of up to 300,000 people over the course of a show which may last for a week or more.

Total attendance figures may have limited relevance in estimating parking demand or effect on traffic. Large-attendance shows are sometimes at Hynes for over a week and may be open 12 hours per day. Parking demand at such events would be a function of attendance peaking, vehicle occupancy, and duration of stay. Much of the demand may occur at night or on weekends when the parking supply is more available to Hynes users. Convention parking demand is a function of total attendance, and is most sensitive to type: local or national.

One favorable aspect of Hynes parking demand, regardless of any increases that are taking place, is that the hall is usually quiet before the Christmas holidays when other demand, especially for shopper parking, is high. For example, while most of 1983 is already scheduled for use, December 11 through 31 is currently not reserved. A check with Hynes management found that this is typical for any year. Therefore, any supply developed to serve Hynes would probably be available to supplement the existing Back Bay supply during this busy shopping period.

The figures indicate that even without an expansion, the attendance size of an average event is increasing. This increases the instantaneous demand for parking. Even assuming that most gate shows will use Bayside Mall, the increasing attendance at trade shows, especially those with a regional or local orientation, means that more parking will be needed. The expansion will increase this demand but, more important, it may increase the number of days per year that Hynes will host regional trade shows. It is this factor that is more critical than the increase in hotel-oriented population prevalent at national conventions and may indicate the need for an increase in the parking supply serving Hynes. However, either situation will serve to support the need for parking.

ATTENDANCE AT HYNES AUDITORIUM
Number of Attendees at Events

	Maximum	Mean	Median
1965		9,100	4,500
1966	200,000	22,000	4,000
1967	300,000	25,000	4,000
1968	250,000	33,000	4,000
1969	250,000	41,000	6,000
1970	250,000	42,000	5,500
1971	250,000	39,000	4,000
1972	275,000	46,000	4,500
1973	300,000	48,000	4,000
1974	300,000	58,000	7,000
1975	300,000	53,000	7,000
1976	300,000	37,000	4,000
1977	300,000	50,000	5,500
1978	300,000	36,000	5,000

Source: Hynes Utilization Study, 1965 - 1978, Hynes Auditorium Staff Report, no date.

EXHIBIT 1

PARKING DEMAND

Calculated Parking Demand

Since there are no hard and fast standards for determining parking demand for Hynes, the approach in this report has been to come at the question from more than one direction. The first of these was to use existing studies and reports to determine Hynes demand. Using published information in handbooks and given the number of people that are expected to attend, it is possible to estimate parking demand for events. Several Eno Foundations for Transportation publications in particular have addressed the issue of parking demand for auditoriums and large assemblies.

It may not be entirely realistic to use these figures for facilities that hold shows involving a constant turnover and vary in activity over the course of a day. In particular, gate shows which attract up to 300,000 people per show cannot be treated as "regular" events. They are more akin to recreational activities where patronage peaks at night and on weekends. There are exceptions, however. The recent Northeast Computer Show peaked during the day because regional schools sent platoons of students to the show during the day. When this occurs, most arrivals are non-auto. During the computer show, held in November, 1982, 75 school buses were parked in the immediate vicinity of Hynes.

Ignoring such unusual occurrences, this section provides estimates of parking demand using published data. It is significant that the figures arrived at in this section are close to the numbers obtained using more empirical methods for determining demand.

Gate Shows: A search of previously published articles relating to parking demand for auditoriums and related facilities produced no figures that could be applied directly to Hynes Auditorium. The unique geography, function and location of any land use

places some doubt on the usefulness of applying information obtained in one location to others. It is particularly so for an auditorium which is a unique use and for which comparable samples are non-existent.

None of the sources of information on parking demand for auditoriums used a design day or hour such as is done for shopping centers where it is recognized that the parking supply cannot meet peak pre-Christmas demand and the supply is designed to meet only a portion of the peak demand. All the sources for auditoriums gave data in terms of peak demand.

A number of Eno publications recommend a standard of one space for every four persons. Using an estimated peak period attendance of 13,500 persons at a gate show and a recommended standard of one space per four persons results in a parking demand of 3,375 spaces. Some sources suggest that one space for every four people produces a somewhat high parking value and one space for every five or more persons would provide sufficient parking for most situations. At one space per five people, the parking demand for attendees would be 2,700 spaces.

Based on these sources, if Hynes were an isolated, free-standing facility without its unique characteristics and location, it would probably require about 3,500 parking spaces to handle exhibitors and patrons for gate shows with an average daily attendance of about 13,500 people. However, given its location, the availability of public transportation, the likelihood of a certain percentage of walk-ins, and the availability of a large reservoir of parking which at times is almost totally available to Hynes, the picture changes.

One aspect of gate shows, which create the greatest overall parking demand, is that as a recreational activity, their peak attendance times do not usually coincide with the peak demand for parking in the Back Bay area. Most gate shows peak after work hours or on weekends when the local parking supply is

much more accessible to Hynes patrons. Exhibit 2 shows the calculation of parking demand for a gate show of 250,000 people.

Regional Conventions: Theoretical calculations of parking demand for conventions are shown in Exhibit 3. A convention results in a much lower demand for parking. The average trade convention attendance at Hynes is about 5,000 people. The worst parking condition occurs at a regional or statewide convention, when most people do not stay in hotels but arrive each day by car. When local residents attend a convention, an estimated 80 percent of them attend each day and about 80 percent of these are there at one time.

Therefore, for a convention with a total attendance of 5,000 people, about 3,000 can be expected on-site at any one time. Assuming that 85 percent of these people arrive by car and 15 percent by public transportation, walking or drop-offs, and assuming that vehicle occupancy for local attendees would be about 1.4 persons per car, the resultant parking demand would be 1,943 spaces. This does not take into consideration exhibitor demand. Assuming a show involving a number of small exhibitors, this demand alone could easily amount to another 200 to 300 cars. Thus, the total for regional convention purposes is on the order of 2,000 spaces.

National Convention: Even though national conventions are larger than regional ones, they generate less demand for parking because most people arrive by plane and stay at nearby hotels. The same applies to exhibitors, most of whom represent national companies. Nevertheless, local representation is usually higher at a national convention, since more people are in a position to attend sessions for a day or two.

Assuming a convention or trade show of 12,000 people (total attendance) and local representation of 25 percent, the parking demand would be about 1,100 cars for attendees, or about 1,300

including exhibitors. (See Exhibit 4.) Most national conventions are not this large, but 12,000 is probably representative of the type that could be handled in Boston with the new hotels now under construction.

Calculated Parking Demand Summary: From a theoretical calculated demand standpoint, Hynes Auditorium generates an average demand for between 1,100 and 3,400 spaces, depending on its use for a local convention, regional meeting, or gate show. When that demand occurs during midweek daytimes, there is a shortfall of spaces, resulting in illegal parking, longer walking distances, greater use of public transportation, use of satellite parking and shuttle buses, and probably some slight reduction in attendance. Within a ten minute walking distance, there are now about 10,000 parking spaces. Many of these are dedicated to tenant, customer, visitor or guest use, and are not open to the public during the day. Theoretically, and probably in practise, fewer than 1,000 spaces are available to Hynes attendees during midweek days. However, a supply of about 2,000 to 3,000 nighttime and weekend spaces appears to be available for Hynes use. Day or night, Hynes users are in competition with others for these spaces and, as a result, they may displace or be displaced.

Assuming that up to 1,000 Hynes cars can find space in nearby garages and other legal spaces, a level that may not always be attainable, there is a current shortfall of up to 2,500 spaces, depending on the Hynes activity.

CALCULATION OF PARKING DEMAND

Gate Show of 250,000 People

Hynes Auditorium

Total Attendance: 250,000 people

Duration of Show: 9 days

Average Daily Attendance: $\frac{250,000}{9}$ = 27,000 people

Attendance at Any One Time: 50 Percent of Daily Attendance
= .5 × 27,000 = 13,500

Public Transportation Use: 25 Percent = 3,375

Automobile Use: 75 Percent = .75 × 13,500 = 10,125

Automobile Occupancy: 3 people/car

Number of Cars: $\frac{10,125}{3}$ = 3,375

EXHIBIT 2

CALCULATION OF PARKING DEMAND

Regional Convention of 5,000 People

Hynes Auditorium

Total Attendance:	5,000 people
Duration of Show:	4 days
Average Daily Attendance:	80 Percent of Total Attendance .8 x 5,000 = 4,000 people
Attendance at Any One Time:	80 Percent of 4,000 = 3,200 people
Public Transportation Use:	15 Percent = 480
Automobile Use:	85 Percent = 2,720
Automobile Occupancy:	1.4 persons/car
Number of Cars:	1,943

EXHIBIT 3

CALCULATION OF PARKING DEMAND

National Convention of 12,000 People

Hynes Auditorium

Total Attendance:	12,000 People
Duration of Show:	4 days
Average Daily Attendance:	75 Percent of Total Attendance .75 x 12,000 = 9,000 People
Attendance at Any One Time:	80 Percent of Daily Attendance = 7,200
Percent Local Members:	25 Percent = 1,800
Public Transportation Use:	10 Percent
Automobile Use:	90 Percent = 1,620 People
Automobile Occupancy:	1.5 Persons/Car
Number of Cars:	1,080

EXHIBIT 4

Results of Patron Survey

A second approach to determining parking demand is based on actual experience as determined from a sampling of visitors. A survey was made of people attending the Tech HiFi show at the Hynes Auditorium on Friday and Saturday, October 8 and 9, 1982. Respondents were queried in the lobby as to what form of transportation they took to get to Hynes, where they parked, and how far away.

Results of the weekday survey are as follows: only 29 percent parked in the garages, either the Prudential or Cheri; 29 percent parked at the curb; and 43 percent either took public transportation (26 percent) or walked (16 percent).

On Saturday, however, the situation changed significantly, reflecting the availability of off-street parking. Forty-one percent of people parked in garages, 28 percent parked at the curb, and 30 percent took public transportation (19 percent) or walked (11 percent). A summary is shown in Exhibit 5.

The percentage of walkers was highest on late Friday afternoon and early evening suggesting the possibility that people walked over from work or school, or lived in Back Bay. This show was particularly attractive to a younger audience interested in stereo equipment, a large number of whom live or attend school in the Back Bay area. The relatively young age of the group may explain the high percentage of public transportation/walking.

The big difference between Friday and Saturday appears to be that on Friday, many people took public transportation or walked, while on Saturday, many people were able to park in nearby garages. It may be significant that on Friday and Saturday, the same percentage parked at the curb, indicating a practical limit to the use of curb space and suggesting that

curb spaces cannot be counted on to satisfy more than a fixed amount of the parking demand even during off-peak times.

The study provides some interesting information on where people park for a gate show and provides an additional basis for projecting garage demand. Theoretically, the difference in garage use between a Friday and a Saturday (28 percent on Friday vs. 42 percent on Saturday) represents the garage demand that is unmet on a weekday. This assumes that some people who arrived at the show by walking or by public transportation could or would choose to come by car and park in a garage. The calculation in Exhibit 6 shows that this 14 percent difference results in a "demand" for 630 more weekday spaces. If on-site population increases because of the expansion or if vehicle occupancy is less than 3.0 (this is a good design value), the figure would be greater.

What the study shows is that there is a basis for assuming that a fairly high percentage of arrivals will come by public transportation and walking. The Friday vs. Saturday non-auto arrivals of between 30 and 42 percent are probably a little high because this particular show was geared to younger people, many of whom live or go to school in the area surrounding Hynes. Calculations elsewhere in this report assume 15 to 25 percent non-auto arrivals, which seems realistic. This would make the parking demand figure higher.

RESULTS OF SURVEY AT GATE SHOW

Tech HiFi
Friday and Saturday, October 8 and 9, 1982

Location or Mode	Percent on Friday	Percent on Saturday
Prudential	17%	24%
Cheri	10%	17%
John Hancock	0	0
Curb (< 5 min. walk)	20%	21%
Curb (5-10 min. walk)	7%	5%
Curb (10+ min. walk)	2%	2%
Public Transportation	26%	19%
Walk	16%	11%
Taxi	2%	1%
	100%	100%

EXHIBIT 5

THEORETICAL WEEKDAY PARKING SHORTFALL

Based on Tech HiFi Show
October 8 and 9, 1982

Saturday Garage Use:	42 Percent*
Friday Garage Use:	28 Percent*
Difference: (Latent Demand for Parking)	14 Percent*

Assumed Maximum Daily Attendance:	13,500**
Assumed Vehicle Occupancy:	3.0 Persons/Car

Calculation: (.14) × (13,500) ÷ (3.0) = 630 Spaces

* From Patron Survey
** From Calculation

EXHIBIT 6

Analysis of Hynes Utilization Study: 1965 - 1978

This section represents an effort to estimate parking demand based on a Hynes Auditorium utilization study (1965 - 1978). This study also provided some information on the frequency of events that create high parking demand at Hynes. After reviewing the list of show sponsors and attendance figures, the following categories were selected for evaluation of parking demand:

TYPE OF EVENT	DESCRIPTION
Consumer Gate Show:	Open to the public; local patronage; heavily advertised; involve a popular subject (autos, home, etc.).
Trade Gate Show:	Open to the public at certain times; promoted mostly through the industry; limited advertising; specialty subject (hardware, gift, solar, etc.).
National Convention:	Most delegates stay at nearby hotels; not open to public (AIA, ITE, etc.).
Regional Convention:	Trade shows, generally not open to the public or advertised; most people commute on a daily basis, but some hotel use (New England Dental Conference).
Special Events:	Graduations, concerts, private meetings (Simmons College Commencement, Metropolitan Opera, etc.).

An estimate has been made of the parking demand for each category. It should be understood that the purpose of this is to provide a framework for evaluating the frequency and intensity of Hynes parking demand. In all categories, there is a wide range of values since each event is unique. A high rather than maximum average has been chosen to represent each category since maximum values represent extreme cases that occur once or twice a year. Under the circumstances, any attempt at meeting the parking demand required for these maximum demands is unrealistic.

The number of attendees was obtained from the Utilization Study; the type of event was determined from the name of the organization and the attendance figures; the number of exhibitors was estimated based on discussions with several exhibition specialists; hotel vs. local split was estimated based on interviews and experience; and parking demand was based on local participation - two spaces per local exhibitor and 1.5 to 3.0 persons per car for attendees.

Exhibits 7 through 11 show calculations of the demand.

DEMAND BASED ON UTILIZATION STUDY: CONSUMER GATE SHOW

Type of Show:	Consumer Gate Show	
Frequency:	10 Per Year	
Number of Exhibitors:	National:	Avg.: 100
	Local:	Avg.: 250
Number of Attendees:	Total Show:	250,000
	Average Day:	35,000
	At One Time:	12,000
	Hotel Users:	0%
	Local:	100%
	Percent Auto:	75%
Parking Demand:	Exhibitors:	500
	Attendees:	3,000 (9,000 @ 3/vehicle)
	Total:	3,500

Note: These shows are often run next to and through weekends when regular parking demand is low. Vehicle occupancy is highest of any show.

EXHIBIT 7

DEMAND BASED ON UTILIZATION STUDY: TRADE GATE SHOW

Type of Show:	Trade Gate Show	
Frequency:	5 Per Year	
Number of Exhibitors:	National:	Avg.: 200
	Local:	Avg.: 200
Number of Attendees:	Total Show:	10,000
	Average Day:	3,500
	At One Time:	2,500
	Hotel Users:	10%
	Local:	90%
	Percent Auto:	90%
Parking Demand:	Exhibitors:	400
	Attendees:	1,500 (2,250 @ 1.5/vehicle)
	Total:	1,900

Note: Specialty shows of limited public interest but still advertised. Most attendees from the trade.

EXHIBIT 8

DEMAND BASED ON UTILIZATION STUDY: NATIONAL CONVENTION

Type of Show:	National Convention	
Frequency:	25 Per Year	
Number of Exhibitors:	National:	Avg.: 500
	Local:	Avg.: 100
Number of Attendees:	Total Show:	7,500
	Average Day:	6,000 (80% of total)
	At One Time:	6,000
	Hotel Users:	4,500 (75%)
	Local:	1,500 (25%)
	Percent Auto:	100%
Parking Demand:	Exhibitors:	200
	Attendees:	1,000 (1,500 @ 1.5/vehicle)
	Total:	1,200

Note: Local membership usually overrepresented, increasing demand for parking. Hotel arrivals by car would not use car to reach Hynes.

EXHIBIT 9

DEMAND BASED ON UTILIZATION STUDY: REGIONAL CONVENTION

Type of Show:	Regional Convention	
Frequency:	10 Per Year	
Number of Exhibitors:	National:	Avg.: 100
	Local:	Avg.: 200
Number of Attendees:	Total Show:	5,000
	Average Day:	4,000 (80% of total)
	At One Time:	3,000 (75% of Average Day)
	Hotel Users:	300 (10%)
	Local:	2,700 (90%)
	Percent Auto:	90%
Parking Demand:	Exhibitors:	400
	Attendees:	1,620 (2,430 @ 1.5/vehicle)
	Total:	2,020

EXHIBIT 10

DEMAND BASED ON UTILIZATION STUDY: SPECIAL EVENT

Type of Show:	Special Event		
Frequency:	10 Per Year		
Number of Exhibitors:	National:		Avg.: 0
	Local:		Avg.: 2
Number of Attendees:	Total Show:	3,500	
	Average Day:	3,500	
	At One Time:	3,500	
	Hotel Users:	0%	
	Local:	100%	
	Percent Auto:	100%	
Parking Demand:	Exhibitors:	70 (100 Organizers @ 1.5/veh.)	
	Attendees:	1,170 (3,500 @ 3/vehicle)	
	Total:	1,200	

Note: Special shows might have entertainment or displays, but entourages are small. Most are graduations, concerts, company meetings.

EXHIBIT 11

Summary

Combining all of the above approaches to determining parking demand leads to a figure of about 2,100 spaces needed to serve Hynes. This demand would be exceeded about 70 days a year, mostly when consumer gate shows are running. For another 40 days, the demand would be at about the 2,000 space level. For the remaining 110 days when activities are taking place at Hynes, the demand would be at the 1,200 space level. Finally, for about 140 days a year, Hynes would not be active. Many of these days would be in between shows when exhibitors are active. During these times, parking demand would be under 300 to 400 spaces.

Assuming that about 1,000 spaces are generally available, the unmet parking demand is for about 1,100 spaces. This demand would occur for about 110 days, or about one-third of a year, when regional shows and consumer gate shows are active. For another one-third of the year, much of the total demand for 1,200 spaces can be met by the existing parking supply so that there is an unmet demand during this time of 200 to 300 spaces. For the final third of the year, Hynes demand can be met by the existing supply.

On those days when the parking demand exceeds the local supply, some alternatives are possible. Many of the peak days associated with gate shows occur on weekends when the number of available spaces can accommodate Hynes demand. Most consumer gate shows include two weekends so they can capitalize on the weekend parking.

For regional shows, excess demand can often be met by greater use of public transportation, satellite parking/shuttle buses, and, to a degree, by overloading the local parking supply. In any case, provision of about 1,000 more spaces would satisfy the demand for nearly all regional trade shows. About 40

percent of the days on which consumer gate shows are held are on weekends and other days when local offices are closed. This leaves only about 40 days a year when Hynes demand would severely overload the local parking supply.

PARKING DEMAND SUMMARY

Type of Show	Frequency	Average No. of Days	Composite Total Parking Demand
National Convention	25	4	1,200
Consumer Gate Show	10	7	3,500
Regional Convention	10	3	2,100
Special Event	10	1	1,200
Trade Gate Show	5	3	2,000
Weighted Average Based on Frequency of Events	60/Year		2,100

EXHIBIT 12

FUTURE HYNES ACTIVITY

Projections

The demand calculation and estimates contained in the previous sections are predicated on an annual rate of 60 events per year. For the last several years, Hynes has hosted between 50 and 60 events per year, yet there are still weeks when no activity is scheduled. Some of this pattern is due to several factors: for example, the early part of July and the latter part of December see very few events.

While theoretically, the expanded auditorium could double the number of events, this will not happen. If large national conventions come to Boston, they will utilize most of the auditorium and allow none but very small events to function simultaneously. If large regional conventions are scheduled, managers are apt to choose weeks when they are exclusive tenants in order to avoid conflicts with other large groups trying to use the limited facilities of the area (i.e., parking, restaurants, etc.). In addition, there is probably some finite limit to the number of events that need to use a Hynes size facility.

Also working to limit Hynes use will be existing and new competing facilities. Bayside Mall and Boscom have already been mentioned as potentially strong competition. But there is more. The Northeast Trade Center in Woburn is becoming better known. Some of the new hotels have the capacity to attract small groups that might otherwise use Hynes. And outside of Boston, but still within New England, there seems to be a trend toward building convention and meeting centers.

None of these competing facilities will affect Hynes's ability to attract large national conventions, but they could limit the total number of events per year. Thus, the large conventions will probably end up constituting a larger percentage of Hynes events than at present.

Exhibit 13 is a table prepared by the Boston Redevelopment Authority staff which examines the range of possibilities for an enlarged Hynes. Assuming a linear expansion from 60 to 90 events, national conventions would go from 25 to 42 per year. With a greater convention orientation, they would jump to 60, more than double the current rate.

Under the convention option, there would be a reduction in the number of consumer gate shows, which would also reduce the number of days of peak parking demand from 110 days to 100 days per year. Days of peak parking demand associated with consumer gate shows would drop from 40 to 25 days.

For the purposes of this report, the assumption has been made that the current number and mix of events represents a fair basis for determining demand. While some doubling up of events is expected causing an increase in parking demand, there should be some reduction in gate shows and an increase in national conventions causing a decrease in parking demand. The net result may well produce the same parking demand as at present.

Therefore, without any overriding justification for using event projections, this study uses a known quantity for a base. However, with the figures contained herein, the parking demand for any scenario can be calculated quickly.

Hynes Auditorium

Existing and Projected Bookings

Show Type	I Existing Mix		II Current Mix Projection		III Convention Orientatior	
	1983		1987		1987	
	No.	(%)	No.	(%)	No.	(%)
Regional Conventions	6	(10)	12	(13)	9	(10)
National Conventions	25	(42)	42	(47)	60	(67)
Trade Gate	8	(13)	14	(16)	10	(11)
Consumer Gate	12	(20)	12	(13)	6	(7)
Special Event	9	(15)	10	(11)	5	(6)
TOTAL EVENTS	60	(100)	90	(100)	90	(100)

Note: Agreement with Back Bay Neighborhood limits Gate/Special Events to 22 events per season. This limitation assumed also for Options II and III.

Table prepared by Laurence Koff, Boston Redevelopment Authority, December, 1982, with input from Albert Kramer, Hynes Auditorium Manager.

EXHIBIT 13

PARKING SUPPLY

Results of Garage Surveys

Any new parking to serve the Hynes expansion will have to come in the form of new spaces. On a daily 9:00 to 5:00 basis, the existing parking supply around Hynes Auditorium is utilized almost completely. Surveys of adjacent parking garages were made when Hynes was open and closed. The results are shown in Exhibit 14. The difference in available parking when Hynes is open or closed is only 400 spaces. Some of this difference may be a function of when the surveys were made, but the important thing is that in both cases, the total number of available spaces is very small -- 200 when Hynes was operating and 600 when it was closed.

Considering that we are dealing with a supply of 6,300 spaces, normal turnover would result in some empty spaces. Assuming that parking "capacity" is reached at 90 to 95 percent of supply, there are not many spaces available for Hynes patrons. When the auditorium is operating, it is likely that many spaces that are open to the public are used by Hynes attendees on a first-come, first-served basis.

The following is a description of the parking supply when Hynes was hosting a national convention.

1. At Sack Cinema garage, only 21 spaces were available during the middle part of the afternoon. The attendant stated that the garage is usually filled before 8:30 am and stays filled all day long. During the time of the survey, not a single car entered or left the facility, indicating the high degree of long-term commuter use.

2. At Prudential South Side Parking (Sheraton area), a survey of the yellow and orange levels found about 25 empty spaces. At the same time, there were about 50 informally or illegally parked cars (along aisles, in fire

lanes, blocking pedestrian walks, etc.). The yellow level is open almost completely to public parking, but there is a section restricted for hotel guests. This area was not counted, but it had about 40 spaces available at the time of the survey. The orange level spaces are reserved for Prudential tenants.

3. At Prudential North Side (Saks and apartments), the survey found about 105 vacant spaces. The blue level, accessible from Boylston Street/Ring Road and Exeter Street, had about 65 vacancies, while the green level had about 40 empty spaces in the public parking area. No count was made of available spaces in the reserved apartment spaces not accessible to the public and located on the green level. All together, of 3,500 Prudential Center spaces, only 200 were available to the public during the day.

There do not appear to be any other significant sources of parking for the auditorium. An open air lot on Blagden Street was filled to excess capacity at the time of the survey. All other parking in this area is restricted to private use and not open to the public. The survey did not include the 190 cars that are parked on Ring Road at any one time during the day. If Prudential decides to eliminate Ring Road, these spaces would be added to the local parking deficit. Periodically, Prudential does enforce the No Parking regulation, which typically results in a reduction of about 50 percent of parked cars.

An inventory made in October, 1982, between 7:30 and 8:30 pm on a night when Hynes was not in operation showed a totally different picture. (See Exhibit 15.) Most significantly, the Prudential garage had less than 500 cars parked in it, leaving a balance of about 3,000 spaces that could have been used for a Hynes event. The Cheri garage had 360 empty spaces out of its total supply of 500.

The John Hancock garage, with about 1,800 spaces, had almost 1,500 of them occupied at the time of the survey. Apparently some local evening event had come close to filling that garage. This points out the sensitivity of that area to events at facilities other than Hynes.

The implication of this nighttime survey is that spaces built specifically to satisfy the Hynes' weekday peak demand may not be used at night unless there is a Hynes activity. The Prudential garage by itself could probably handle the current demand of a nighttime activity at Hynes. Most conventions do not run at night at Hynes. Most nighttime activity is generated by gate shows.

Nighttime activities at the hotels or the expected increase in activity from the Copley Place project could result in additional use of spaces at night, but it is likely that Hynes could still count on at least 2,000 to 3,000 existing spaces in the Prudential or Cheri garage for nighttime use most of the time.

RESULTS OF DAYTIME GARAGE SURVEY AT SELECTED LOCATIONS

Wednesday, May 5, 1982
2:00 - 3:00 pm

Hynes Activity: National Association of College Administrators

Garage	No. Spaces	No. Occupied	No. Empty
Prudential	3,500	3,300	200
Cheri	500	500+*	0
Church Park	500	500	0
John Hancock	1,800	1,800*	0
Total	6,300	6,100	200

---

* Full sign displayed.

Monday, November 29, 1982
3:00 - 4:00 pm

Hynes Activity: None

Garage	No. Spaces	No. Occupied	No. Empty
Prudential	3,500	3,150	350
Cheri	500	350	150
Church Park	500	400	100
John Hancock	1,800	1,750	50
Total	6,300	5,650	650

EXHIBIT 14

RESULTS OF NIGHTTIME GARAGE SURVEY AT SELECTED LOCATIONS

Thursday, October 7, 1982
7:30 - 8:30 pm

Hynes Activity: None

Garage	No. Spaces	No. Occupied	No. Empty
Prudential	3,500±	466	3,000±
Cheri	500	140	360
Church Park	500	375	125
John Hancock	1,800	1,470	330
Total	6,300	2,451	3,815

EXHIBIT 15

Nearby Parking Supply

Exhibit 16 shows a summary of the nearby parking facilities and the approximate walking distance from them to the Hynes entrance at Dalton and Boylston Streets. The Hynes already has a very large supply available to serve the auditorium at certain times, mainly at night and on weekends.

In addition to the locations listed in the exhibit, there are some parking garages that could come on line in the next few years. A mixed-use development at Mass. Ave. and Boylston Street might be feasible even without use of its parking component by Hynes. Up to 1,000 cars could be located on that site.

The recently opened Hilton Hotel provides an additional 250 spaces. However, most of these will be used by the hotel and will generally not be available even at night.

Copley Place will have nearly 1,500 spaces at the outset. Some additional off-street parking, between 500 to 1,000 spaces, might also be provided by Copley Place, but the walking distance from these spaces would make them unattractive for Hynes users. More likely, such a facility would attract some of the demand east of the Prudential Center thereby freeing up some of the Prudential garage for Hynes use. Daytime use of any new parking facility is expected to be spoken for by Copley Place or adjacent generators.

There has been some speculation that Prudential Center would be expanded to include additional parking. However, it is unlikely that the additional parking supply would be more than enough to satisfy Prudential's own demands, especially during the day. It is conceivable that such spaces would be available at night, in which case they would be attractive to Hynes users.

Despite a very large and growing nearby parking supply, the number of spaces open to Hynes users is now, and will

continue to be, limited. Whatever spaces are open will be available only on a first-come, first-served basis. As a result, Hynes users, who may arrive later in the morning than others will probably find very few spaces in the existing parking supply. Construction of new off-street spaces will be built by interests who intend to satisfy their own demands, and who would make them available only during off-peak periods. Thus, Hynes cannot depend on any new outside supply for their daytime demand, which is the most critical period insofar as Hynes and the neighborhood is concerned.

PARKING GARAGES

HYNES AUDITORIUM AREA

Facility	Capacity	Daytime Availability to Hynes, Others	Walking Distance to Boylston/Dalton or Prudential Entrance
Prudential	3,500	500	200' - 500'
Cheri	500	100	200'
Danker and Donahue	500	50	800'
Church Park	500	100	2,200'
John Hancock	1,800	100	2,000'
Hilton	265	0	500'
Christian Science	550	0	1,200'
Colonnade	275	0	900'
TOTAL		850	

EXHIBIT 16

RECOMMENDATIONS

Number of Spaces for Off-Street Parking

The results of the alternative demand estimates show that Hynes needs a total of about 2,000 parking spaces to serve its needs. This would handle all but the peak demand generated by large consumer gate shows falling on weekdays. Of this amount, about 1,000 spaces are available from the existing parking supply, both off-street and on-street.

This conclusion is based on current observed shortages as well as theoretical calculations of parking demand. The expansion of Hynes floor area will not necessarily result in an equal increase in parking demand. The increased square footage is expected to have the single greatest effect of increasing the number of events for which some additional parking is needed. The expected increase in national conventions will mitigate this effect.

There could be a much greater shortage of parking unless some operational and booking controls are instituted. Introduction of two regional trade shows or a trade show and a gate show simultaneously would double parking demand projections. It is believed that the limitations of the area in terms of daytime parking shortages, Hynes loading area, physical access, and other support elements will probably also place a ceiling on maximum auditorium parking demand.

Based on an expanded Hynes, the maximum parking demand is in the 3,000 to 4,000 space range if the auditorium were to provide exclusive parking for its patrons. It is unlikely that such an off-street parking supply could physically be built, especially if financial feasibility is a factor. This is one reason for the cautious demand projection in this report. It is estimated that for garages built in the Back Bay area to be feasible, about $8.00 a day in income per space for a seven day week

would be required. At night and on weekends, much of the Hynes demand can be handled by the existing supply, leaving any new parking in a potentially uncompetitive situation. Much will depend on where Hynes parking is built, but current sites are not as attractive as some existing parking so that financial feasibility is a genuine concern.

The prospect of building multiple-use parking for Hynes is not good. The greatest demand for parking in the Back Bay is during working hours, and this is when the parking supply for Hynes is most critical. Construction of spaces to handle that demand could result in empty spaces at night and on weekends, even when Hynes is operating.

The contention that when Hynes is not using its spaces they might be occupied by employees has some problems. It will be difficult to generate a regular clientele at a garage that consistently has days when it would not be available. Furthermore, with increased Hynes utilization, there may not be as many days when the auditorium will be empty. Thus, for the moment, there does not appear to be any compatible use in the area that would allow a garage to be used for other purposes when not being used for Hynes.

Many of the commercial neighbors in the area would accept an increase in the parking supply as a way of ameliorating the current "shortage." However, a portion of this shortage is caused by other facilities that generate traffic beyond their on-site parking capabilities. Even the new Hilton, with its added parking supply, is expected barely to hold its own and is likely to place an additional burden on the existing supply when it is operating at full blast.

In sum, it is estimated that 1,000 to 1,200 spaces built adjacent to Hynes would be filled during the day and would be close enough to Hynes Auditorium to have first crack at nighttime users. The difficulty in finding a parking space in the Hynes

area during weekdays, belies to some degree the feasibility of adding new spaces. As noted elsewhere in this report, garage occupancy surveys when Hynes is closed shows a substantial supply of available parking. During the day, finding a parking space is much easier when Hynes is not operating.

Garage Location

Because of the desire to use any garage for multiple uses, especially those that would keep it filled more than just on weekdays, the closer a facility is to Hynes, the more financially feasible it is and the more useful it is to Hynes and others.

The two sites looked at so far, the triangular Dalton/Boylston site and the Boylston/Mass. Ave. site, are both able to serve Hynes when there is a parking shortage. However, the further away lot would probably not be able to charge the same rates as one adjacent to Hynes. Furthermore, a garage located at Boylston/Mass. Ave. is unlikely to attract night users or a full complement of weekend patrons.

If the Boylston/Mass. Ave. site is used for a garage as part of a combined development, its use for Hynes is diminished, since the demand for any parking in that development is most likely to occur simultaneously with Hynes. While it may be feasible for that site to develop on its own parking and possibly act as a secondary source for Hynes, it is not as desirable as the location adjacent to Hynes.

Much of the parking discussion has centered around financial feasibility. If this is not a consideration, both sites are in a position to become primary suppliers of parking to Hynes. The Boylston/Mass. Ave. site is only 800 feet from the Hynes entrance and is certainly attractive from that standpoint. If either site is to be dedicated for exclusive Hynes use, financial feasibility would be low.

The current parking freeze regulations may have some effect on the parking decision. If the freeze is maintained, the Boylston/Mass. Ave. site becomes more attractive because it is outside the freeze zone. It is reported that there are insufficient spaces in the freeze "bank" to allow construction of a parking garage inside of Mass. Ave. of adequate size to support the

Hynes Auditorium. If the city maintains its freeze, the location question is moot and the additional parking would have to be on the Boylston/Mass. Ave. site. Some close-in parking could be built for employees and other regular users, but this would defeat the purpose of adding more parking for Hynes.

The availability of nighttime parking at the Prudential and Cheri garages strongly suggests that any additional parking supply to serve Hynes Auditorium must be located close by. If a garage were located across at the Mass. Ave./Boylston site, its nighttime utilization for a Hynes event could be very low if the Prudential and Cheri garages are mostly empty. Even a close-by location would be in competition with other garages so that it could not count on strong Hynes use at night even when a large show is running.

Rate structure will affect the attractiveness of a garage, but in a competitive situation, existing garages would probably reduce their rates to attract customers. A garage opposite the Hynes on Dalton Street would naturally get its share of nighttime activity regardless of nearby parking competition, since it would probably have the same rate structure as nearby garages and is closest to the front door of Hynes. Anything much further away could probably not depend on much nighttime use even when Hynes is open.

One of the concerns over adding more parking is the apparent elasticity of demand. Based on surveys and interviews, alternatives to parking do exist. The use of public transportation, satellite parking with shuttle bus service, and walking come into play during very large events. If parking is not available, people find alternative modes. There are few reports of people not coming to Hynes because of a parking shortage.

The same elasticity applies to cost. If the cost for parking at a Hynes garage is too high, patrons are likely to use public transportation or park elsewhere in the city and walk to the site.

In sum, it is believed that a 1,000± car garage adjacent to Hynes Auditorium would greatly improve the parking situation in the area and provide badly needed additional parking for Hynes for daytime use. If properly located, it would also be used at night when Hynes is open, thus improving its financial feasibility. Provisions would have to be made to limit use to Hynes users when necessary, or it could become another all-day employee garage. This can be avoided by modifying rates or otherwise operating the garage to eliminate employee parking. However, it will not be possible to eliminate parking for other uses in the area unless the facility is dedicated to Hynes use.

Cheri Garage Operations

There are two circulation issues associated with adding more spaces to the Cheri garage. One deals with the capacity of the existing ramp system to handle more traffic and the second deals with the interface between the garage and Dalton Street.

One favorable aspect of adding to the Cheri garage is that the existing ramp system could be used for serving the additional spaces. This would allow construction of the new spaces at a lower cost. Inclusion of ramps within any Cheri garage extension could make it infeasible because the building site is so small.

The existing ramp system within the garage does not have a high volume design, but it is capable of handling additional volumes because of the highly directional nature of garage loadings. During the morning rush hour, the flow is almost entirely inbound; during the evening rush hour, the flow is predominantly outbound; at night for events, it is inbound again; and then later at night, it is outbound. As it now stands, the ramp system should be able to handle the additional spaces, especially if overflow parking is kept clear of the ramps and the exit operation is streamlined.

The intersection of the garage entrance and Dalton Street, however, must be modified from a design as well as an operational standpoint. At present, the gate arrangement is set up for two inbound lanes and one outbound lane. The two inbound lanes do not overcome the lack of reservoir space which must now be absorbed by Dalton Street. A current drawback is that operation of the garage, which calls for separate day and nighttime fees, requires that outbound traffic be stopped either to present a valid ticket or for daytime parkers to pay for nighttime parking.

Preliminary plans for the Cheri garage addition show the construction of a new entrance which would tie into the existing ramp system. The current opening onto Dalton Street would become an exit only. It should be possible to reduce delays caused by the gate operation by having all three gates operate in an outbound direction at night. Outbound flows could be organized partly by direction and partly by a fee collection system that does not delay prepaid users.

The proposal for building a new entrance into the Cheri garage, leaving the current entrance/exit as an exit only, will not solve the garage/Dalton problem. Left turns into the garage will still block one lane of Dalton Street traffic at times, and left turns out will still be blocked when there is a back-up from the Boylston Street signal. Obviously, more inbound gate capacity would reduce the inbound obstruction. But more outbound capacity would not improve street traffic conditions. There is enough flexibility in the plan, however, to overcome potential operating drawbacks associated with using the existing Cheri garage ramps to reach the new section.

Traffic operations on Dalton Street may require more attention. The back-up from the Boylston Street light often goes beyond the garage exit, causing a back-up into the garage. Perhaps the more serious operational problem in the area is that although Dalton Street is physically four lanes wide, it has only two operational lanes. The curb lane is almost always occupied by buses, trucks, or illegally parked cars.

Enforcing parking regulations may not resolve that problem, but it is difficult to recommend traffic solutions that call for new construction when the available capacity is in place but inefficiently used. It should not be difficult to keep Dalton Street free of illegal parkers and preserve its four-lane cross-section for moving traffic. Parking for tradesmen and show-related trucks could be allowed during the day when garage

volumes are not high, but the four-lane road is needed during peak periods for left turn storage for inbound garage flows, and for outbound garage flows. As a last resort, there could be police details to regulate the outbound flows from the garage.

Operating Guidelines

Serious consideration should be given to scheduling Hynes events to minimize their impact on traffic and parking. The severest effects of Hynes activities now occur when events coincide with other special or ongoing activities in the area that cause high traffic and/or parking demand. In the future, with the potential of booking simultaneous events, some limitations will have to be set if the local traffic and parking effects of the expansion are to be managed.

In some instances, capacity limitations at the loading docks or at the entries will restrict use. For example, the enlarged size would allow two gate shows to occur simultaneously, but loading and storage limitations would probably prevent it. On the other hand, two regional conventions with limited exhibition activity could occur. In both cases, the impact on local parking would be very severe.

Compatible combinations might be two medium national conventions or one medium local and one medium-to-large national meeting. The criterion insofar as parking is concerned is that only one show at a time is of the type that generates a heavy parking demand.

One result of the expansion is that shows can follow each other more closely. At present, there is some scheduling allowance for set-up and take-down that causes some restriction to use. The expansion will allow closer scheduling of events. This will result in increased utilization without increased peak parking demand.

Ostensibly, the expansion is aimed at attracting large national meetings to Boston that heretofore were unable to come here because of limited hotel and exhibition/meeting room capacity. If this is how the expanded Hynes will be used, the impact on parking will be contained.

Consideration might also be given to a permanent satellite parking area served by buses whenever a heavy demand event occurs. A single location, reasonably close to Hynes with a short shuttle route, is preferred. Shuttle service would be the responsibility of the event sponsor and arrangements could be made at the time an event is booked. This might also be the way to handle the situation when more than one show is booked. The second scheduled event would trigger use of the shuttle system and would be responsible for its cost. Alternatively, shows of over a certain size could be required to pay for shuttle service as part of its rental fee. This would eliminate any arbitrariness in assigning costs. (The same might also apply to hiring police to control traffic and parking around the entrance to Hynes.)

The advantage of a Hynes related satellite lot is that it could become a permanent fixture if enough people know of it and use it. Use of satellite lots on a periodic basis around Route 128, as is now done by some show organizers, diminishes recognition, dilutes the frequency of shuttle bus service, and is expensive on a per user basis. Many locations which have been used in the past for satellite parking have other demands on them that limit their capacity and effectiveness to serve Hynes.

Any such space would probably have to be dedicated to Hynes users since there are few complementary parking uses. The City Hospital area may offer space for a good size, dedicated parking supply (at least 1,000 spaces) with quick access to Hynes by shuttle bus. This location also has excellent accessibility from all parts of the Metropolitan area.

The need for these measures will depend on how an enlarged Hynes is used. If the expansion merely provides more elbow room and space for national events, these operational restrictions may be unnecessary. If the expansion results in double bookings and larger shows, some or all will be needed to keep some cap on the disruption surrounding Hynes at very busy times.

Consideration should also be given to some type of coordination with nearby hotels. No matter what schedule controls Hynes may adopt, if local hotels schedule regional meetings simultaneously, the impact will be just as bad as if everything were held at Hynes. Perhaps some type of coordination could be established so that concurrent high-parking-demand events are avoided or at least controlled.

Show opening and closing times might also be subject to operating guidelines. Some shows now either open or have exhibitor arrivals/departures during the commuter rush hours. Perhaps the increased capacity would encourage exhibitors, especially for shows that have hundreds of small booths, to load during off-peak hours. Starting times for regional meetings should avoid the morning rush hour. This could be established at the time of booking.

These suggestions may require that Hynes place some limitations on users. However, the potential for an increase in the number of peak days is significant. These events are already a source of local concern. Hynes has already agreed to a limit on the number of gate shows in response to NABB concerns. Continuous traffic and parking congestion at Hynes is not in the city's or Hynes' best interest.

TRAFFIC CIRCULATION

Overview

The traffic situation around Hynes Auditorium is not critical. The Volume/Capacity Ratio of the intersection of Boylston Street and Dalton Street, using existing volumes and lanes theoretically available to moving traffic, shows it is uncongested. Observations found that the intersection is free of congestion except when there is widespread illegal parking in the area reducing the Dalton Street approach by half and the Boylston Street approach by one-third. The Dalton Street approach is much more critical, since it carries more vehicles per lane than Boylston Street.

The effect of the Hynes expansion on traffic and parking can be measured in two ways. One is by the increase in traffic volumes resulting from additional parking, and the second is by the effect of front door drop-off, pick-up, bus, and taxi activities. Overall, the additional traffic impacts caused by the Hynes expansion will be limited to a very small area, mainly at the Boylston/Dalton intersection and around the Huntington/Belvedere/Ring Road area.

The Hynes expansion will not create a major increase in volumes. Additional traffic can be expected only from additional parking adjacent to the site. Curbside loading and drop-off activity will probably not increase significantly over the peaks that now occur.

Intersections in the area will be impacted by the Copley Place project, but to a limited degree. The Copley Place traffic report showed an increase in traffic volumes in the Hynes Auditorium area of only three to seven percent during the evening peak hour. Most westbound traffic from Copley Place is expected to use the turnpike. Most of the traffic that now uses Dalton Street at night comes from the Prudential area, and this traffic is expected to continue at its current level.

If a 600 space supply is added to the Cheri garage, it would fill or empty in about a two hour period. If two-thirds occurred during a single hour, 400 trips would be added to Dalton Street during a peak hour. Using a directional distribution of 55 percent toward Boylston Street and 45 percent toward Huntington (based on a 1982 peak hour count at the Cheri garage), 180 to 220 cars would be added to Dalton Street approaching Boylston Street. This would not change the Level of Service at Boylston/Dalton.

At Huntington/Belvedere, which is now operating at Level of Service C, the additional volume would add about five to eight percent to the approach flow and would not significantly affect the Level of Service.

The 1978 total approach volume at the Belvedere/Huntington intersection was 2,550 vehicles during the evening peak hour, and was projected to grow to 3,100 by 1995. The Copley Place add-on was estimated at only 230, a seven percent increase. At Boylston and Dalton, the total approach volume in 1978 was 1,460, which is expected to grow to 1,800 by 1995. Copley Place would add 120 vehicles to that for an increase of seven percent.

In addition to the intersections around the auditorium, any new Hynes traffic would face the same obstacles that face other motorists in the area. With the projected increases in parking from Copley Place, the Hilton Hotel and other projects on the drawing board in Back Bay, the Hynes expansion, in terms of its effect on traffic, will probably not be visible.

Capacity Analysis

Counts made at the intersection of Boylston and Dalton Streets in 1974 and 1982 show no significant change in volume during the evening peak hour (4:30 to 5:30). Total approach volumes were 1,456 vehicles in 1974 and 1,409 vehicles in 1982. On Dalton Street, the approach volume was 778 vehicles on a two-lane approach, and on Boylston Street, it was 631 vehicles on a three-lane approach. Using a simplified intersection Capacity Analysis (Critical Volume Maximum = 1,650), the number of Critical Movements would be 782. This is equivalent to a Volume/Capacity Ratio of .51 or Level of Service A. This is not surprising since the intersection itself is always free of congestion except when there is interference from illegally parked vehicles. Exhibit 17 shows the calculations.

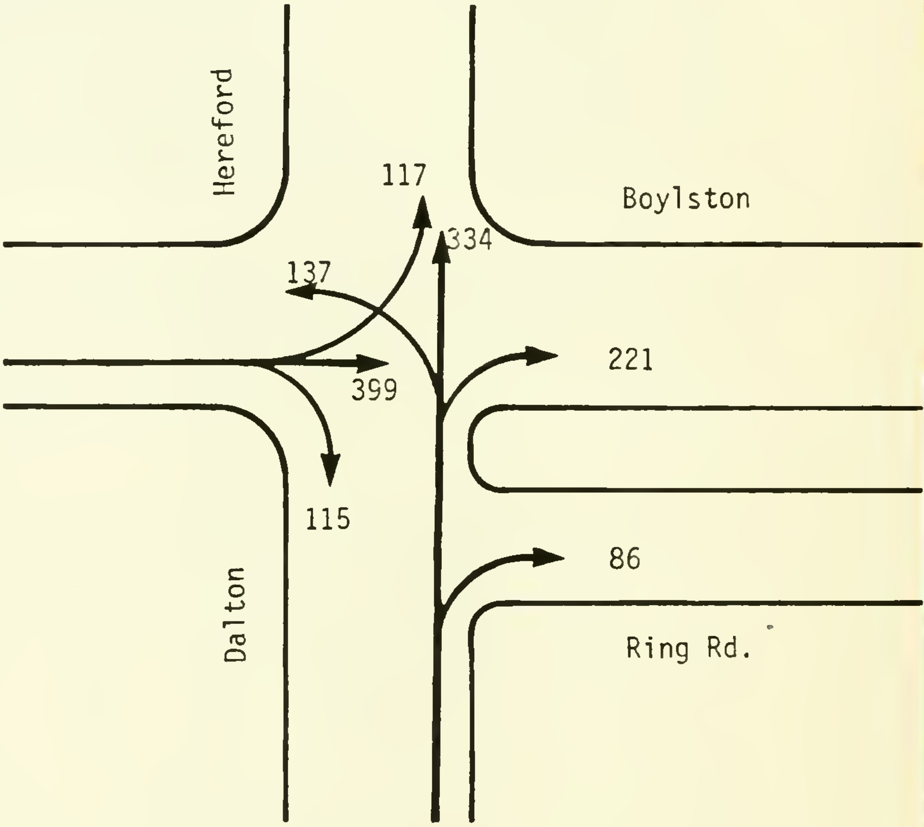
N O R M A N A. A B E N D
TRAFFIC AND TRANSPORTATION CONSULTANT
304 CONCORD ROAD, WAYLAND, MASS. 01778
617-358-7095

SUBJECT CAPACITY CALCULATIONS

DATE 11/15/82 **BY** NAA **SHEET**

BOYLSTON AND DALTON STREETS

4:30–5:30PM



Critical Movement # 1 - Dalton St. in 2 lanes . lane use factor . 6
= 778 X .6 = 467
Critical Movement # 2 - Boylston St. in 2 lanes . lane use factor .6
= 631 X .6 = 379

Critical Volume # 1 - 467
Critical Volume # 2 - 379
Total Critical Volumes - 846
Volume/Capacity Ratio - 846 ÷ 1650 = .51
Level of Service - A

Taxi Access

The opportunities for taxi storage are limited. With a one-way front entrance on Boylston Street, the only logical queue locations lie along the curb on Dalton Street or Boylston Street. Practically, there are no other locations, except for remote ones that would require some type of communication system that is not practical for the Hynes entrance unless there is to be a permanent door crew.

The Dalton Street approach should not be used because the entire four-lane street width is needed for moving traffic, for Cheri garage operations, and for Hynes access. It is not appropriate for taxi storage.

Boylston Street is better suited for taxi storage. There is sufficiently long frontage, about 300 feet between Dalton Street and St. Cecilia Street for about 15 cabs. This is more than the number of taxis waiting at the Sheraton Boston. The curb further west toward Mass. Ave. could also be used for any overflow. This section of curb is in line of sight with the Hynes entrance, which makes it attractive to cab drivers. Perhaps equally important is that the extra lane on Boylston Street is not needed for moving traffic and can be devoted to taxis. The theoretical small loss of street capacity can be managed since the curb lane is now used mostly for right turns into Dalton, which is a low volume movement.

The Boylston Street curb can be used for waiting taxis regardless of how the triangular piece of land between Dalton and Boylston is ultimately used. Even with a truck marshalling yard or garage on the site, the Boylston Street frontage will still be best suited for, and have sufficient capacity to handle, taxi storage for Hynes.

With most of the new hotel supply to serve Hynes within walking distance, there shouldn't be a large increase in taxi volumes at Hynes. Assuming five percent of arrivals by taxi with 1.5 persons per cab for a national convention, about 240 cab arrivals within a one hour period can be expected, with a reasonably uniform arrival rate of four taxis per minute. Curb space for three cabs should be more than adequate to handle this kind of taxi activity.

BACK BAY
B65R
1987

Author

Title
Two Twenty Two Berkley

Date	Issued to

9479 06

BOSTON PUBLIC LIBRARY
3 9999 06314 458 6